We claim:

1. An automated voicemail system for processing incoming speech based messages, comprising:

5   a voice mail processor which includes:

a transcription component for transcribing one or more voicemail messages into text;

a text retrieval component for indexing the one or more transcribed voicemail messages;

10   an information extraction component for identifying selected information within the one or more indexed voicemail messages; and

a user interface for displaying the identified selected information from the one or more indexed voicemail messages.

15   2.   The system of claim 1, wherein the text retrieval component includes a user configurable search mechanism.

3.   The system of claim 1, further comprising:

a summarization component for selecting information from within the one or
20   more voicemail messages.

4.   The system of claim 1, wherein the user interface includes a main information screen and a message body screen.

25   5.   A method of processing a plurality of voicemail messages, the method comprising the steps of:

identifying information within the plurality of voicemail messages; and

providing a user interface to a user for access to information identified in the plurality of voicemail messages, wherein the information is identified using entity
30   extraction and summarization techniques.

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6.   The method of claim 5, wherein the information identified within the voicemail messages includes at least one of telephone numbers, names, dates, keywords, appointments, times and addresses.

5   7.   The method of claim 5, wherein entity extraction is performed upon raw audio files of the plurality of voicemail messages.

8.   A method of providing an interface to a plurality of voicemail messages, the method comprising the steps of:

10   receiving the plurality of voicemail messages as raw audio;

transcribing the plurality of voicemail messages into text;

indexing the text of the plurality of voicemail messages; and

extracting information from the text of plurality of voicemail messages, wherein the information extracted is provides the user with a summary of the information

15   contained within each voicemail message.

9.   A voicemail system which provides one or more users access to information contained within a plurality of voicemails, the system comprising:

means for transcribing a plurality of voicemail messages into searchable text; and

20   means for searching for text within the plurality of voicemail messages.

10.   The voicemail system of claim 9, further comprising:

means for extracting specific information from within the plurality of voicemail messages.

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11.   The voicemail system of claim 9, further comprising:

means for displaying the plurality of voicemail messages on a computer screen.

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12. A method of providing a voicemail user interface, comprising the steps of:

generating, by automatic speech recognition, a transcript of at least one voicemail message;

displaying a textual representation of the at least one voicemail message;

providing a search mechanism for searching for text within the at least one voicemail message; and

providing for speech playback of selected text within the voicemail message.

13. The method of claim 12, further comprising the step of:

automatically extracting specific information from the at least one voicemail message.

14. The method of claim 13, wherein the specific information extracted is displayed in a separate textual display.

15. The method of claim 12, further comprising the step of:

generating an index of the transcript of the at least one voicemail message.

16. A voicemail user interface comprising:

a transcript of a plurality of voicemail messages which is generated by automatic speech recognition;

a textual display of the transcript of the plurality of voicemail messages; and

a search mechanism for searching for text within the plurality of voicemail messages.

17. The voicemail user interface of claim 16, wherein

the transcript of the plurality of voicemail messages is indexed.

18. The voicemail user interface of claim 16, further comprising:

a search results display for displaying the results of a user initiated search.

19.   The voicemail user interface of claim 16, further comprising:

a header information screen which summarizes each of the plurality of voicemail messages.

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